

REMARKS

Claims 1, 3-4, 7 and 9-12 are pending in this application, of which claims 1, 3, 11 and 12 have been amended. No new claims have been added.

A telephonic interview was conducted with the Examiner on August 3, 2006, in which proposed amendments and arguments were presented.

In the interview, the Examiner indicated that the applied prior art teaches that the entire space between the conductive patterns should be deactivated by the oxidizing agent, whatever the dimensions may be. Accordingly, the claims have been amended to address this distinction.

The Examiner has objected to claim 12 for an informality which has been corrected in the aforementioned amendments.

Claims 1, 3, 4, 7 and 9-12 under 35 U.S.C. § 112, second paragraph, as indefinite.

Accordingly, claims 1, 3, 11 and 12 have been amended to correct the noted instances of indefiniteness.

Thus, the 35 U.S.C. § 112, second paragraph, rejection should be withdrawn.

Claims 1, 3, 4, 7, 10 and 12 stand rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent 5,167,992 to Lin et al. (hereafter, "Lin et al.") in view of Applicant's Admitted Prior Art (hereafter, "APA"), EP 837,623 (hereafter, "EP '623") and U.S. Patent 4,668,533 to Miller (hereafter, "Miller").

Applicant respectfully traverses this rejection.

Lin et al. discloses a method for electrolessly plating an overcoat metal on a metal

conductor disposed on a dielectric surface of a substrate. The method includes removing carbonized film from the dielectric surface by applying a plasma discharge, acid treating the metal conductor by dipping the substrate in a first acid solution in order to clean the surface of the metal conductor, activating the metal conductor to allow electroless plating thereon by dipping the substrate in a metal activator solution, deactivating the dielectric surface to prevent electroless plating thereon without deactivating the metal conductor by dipping the substrate in a second acid solution, and plating an overcoat metal on the metal conductor by dipping the substrate in an electroless plating solution so that the overcoat metal plates on and coats the metal conductor without plating on the dielectric surface.

The Examiner has admitted that the oxidizing agent is applied to the entire surface of the conductive pattern, and not just “selectively in portions, which are smaller than a predetermined dimension, out of the space portion between the electrodes,” as recited in claims 1 and 11 of the instant application.

The Examiner has cited APA for teaching that the conductive pattern includes electrodes, among other things.

EP ‘ 623 has been cited for teaching “that it is well known to overplate by electroless plating selectively over conductive patterns on a (Sic.) insulating substrate when making printed circuit boards, for example.”

Miller has been cited for teaching an ink jet printing method including the step of applying materials for electroless plating in selective form.

None of the cited references teaches, mentions or suggests that the oxidizing agent is selectively coated in portions, which are smaller than both a predetermined dimension and the space portion, out of the space portion between the electrodes of the conductive pattern, as in the present invention.

Accordingly, claim 1 has been amended to recite this distinction.

In particular, the inventor has determined that when a metal layer is selectively formed on the conductive pattern by electroless plating, because an electric short-circuit can easily occur in the narrow space portions (especially space portions smaller than 30 μm), the oxidizing agent or the protective film should be formed in the space portions which are smaller than predetermined space portions where the electric short-circuit may easily occur.

None of the cited references teaches, mentions or suggests that it is easy to generate an electric short-circuit in the space portions which are predetermined portions (smaller than 30 μm) in the electroless plating.

Thus, the 35 U.S.C. § 103(a) rejection should be withdrawn.

Claims 9 and 11 stand rejected under 35 U.S.C. § 103(a) as unpatentable over **EP '623** in view of **APA**.

Applicant respectfully traverses this rejection.

As noted above, neither of these cited references teaches, mentions or suggests the features of claim 1, as amended, from which claim 9 depends. Claim 11 has also been similarly amended.

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Thus, the 35 U.S.C. § 103(a) rejection should be withdrawn.

In view of the aforementioned amendments and accompanying remarks, claims 1, 3-4, 7 and 9-12, as amended, are in condition for allowance, which action, at an early date, is requested.

If, for any reason, it is felt that this application is not now in condition for allowance, the Examiner is requested to contact Applicant's undersigned attorney at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

In the event that this paper is not timely filed, Applicant respectfully petitions for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees which may be due with respect to this paper, to Deposit Account No. 01-2340.

Respectfully submitted,

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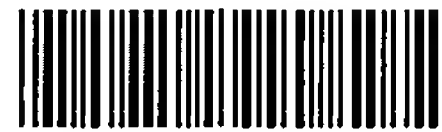
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